

# Work Order ID 85607

**\*85607\***

Page 1

June-12-12 8:48:40 AM

Item ID: D2571

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Saddle, Fwd Out 205

Start Date: 12/06/2012 Start Qty: 8.00

**\*8\***

Cust Item ID:

Required Date: 26/06/2012 Req'd Qty: 8.00

**\*8\***

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/06/12 Tooling:

Run Start **\*NR1\***

QC:

Date: SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D2571	Rev E
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100	HAAS CNC VERTICAL MACHINING #1	0.00							
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**\*100\***

HAAS 1

HAAS CNC vertical machine #1

Memo

Program Batch No. 85607 Double check by: \_\_\_\_\_ 1-Machine Step No 1  
per Folio FA051 and inspect per attached Dimension Sheets2-Machine Step  
No 2 per Folio FA051 and inspect per attached Dimension Sheets3-Machine  
Step No 3 per Folio FA051 and inspect

24 12-6-27 8 Ø

PO 12/06-30

SL

110	CONVENTIONAL MILLING MACHINE	0.00							
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**\*110\***

Mill Conv

Conventional Milling Machine

Memo

Machine keyway as per dwg D2571 & D2572

24 12-7-6 8 1

120	QC2- Inspect parts off machine FAI/FAIB	0.00							
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**\*120\***

QC

Quality Control

Memo

PO 12/06/30

SL

8 1

W/O: 85607		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D2571 PAR #: \_\_\_\_\_ Fault Category: Machining NCR: Yes No DQA: OK Date: 12/01/17  
 Resolution: \_\_\_\_\_ Disposition: Scrap QA: N/C Closed: OK Date: 12/7/18

NCR: 12-1585		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12-16-28	100	- 1 saddle dimensions ① and ② are off by .063, the origin in machine was off by .061 x1 RC origin not set correctly operator error.	WJ 12/07/13	SCRAP replace P 12/7/13 Batch 85432	SL 12/07/13	OK 12/07/13	WJ 12/07/13	S 12/07/13

NOTE: Date & initial all entries

# Work Order ID 85607

June-12-12 8:48:40 AM

**\*85607\***

Page 2

Item ID: D2571

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Saddle, Fwd Out 205

Stop

**\*NS2\***

Start Date: 12/06/2012 Start Qty: 8.00

**\*8\***

Cust Item ID:

Required Date: 26/06/2012 Req'd Qty: 8.00

**\*8\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130

QC8- Inspect parts - second check

0.00

**\*130\***

QC

Memo

0.00

Quality Control

140

Chemical Conversion Coat per QSI005 4.1

0.00

**\*140\***

HandFinish

Memo

0.00

Hand Finishing

150

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

**\*150\***

Powdercoat

Memo

0.00

Powder Coating

START TIME:

FINISH TIME:

OVEN TEMPERATURE:

3200F

1:30

m121841

8X

MT  
12/07/09

mt 12/07/08

8 7/12/09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 85607

June-12-12 8:48:40 AM

**\*85607\***

Page 3

Item ID: D2571

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Saddle, Fwd Out 205

Start Date: 12/06/2012 Start Qty: 8.00

**\*8\***

Cust Item ID:

Required Date: 26/06/2012 Req'd Qty: 8.00

**\*8\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

160

QC3- Inspect Part Finish

0.00

**\*160\***

QC

Memo

0.00

Quality Control

8 6 12/7/9

170

Identify as per dwg & Stock Location: 432

0.00

**\*170\***

Packaging

Memo

0.00

Packaging

8 12-7-10

180

QC21- Final Inspection - Work Order Release

0.00

**\*180\***

QC

Memo

0.00

Quality Control

OK 12/7/11

mk  
-12-07-10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

June-12-12 8:48:43 AM

Page 1

Work Order ID: 85607

**\*85607\***

Parent Item: D2571

**\*D2571\***

Parent Item Name: Saddle, Fwd Out 205

Start Date: 12/06/2012

Required Date: 26/06/2012

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP: 102.10.02Re-format; Change to Dwg Rev. D & incorporated  
D2572KJ

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-007		Manufactured	No			100	Each	17.0000	1	8			
<b>*D6101-007*</b>									<b>**</b>				
Saddle Billet													

*27-6*

Location

Loc Qty

Loc Code

MAT041

16

83450

16

MAT042

1

79875

1

*854/32*

*8*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



<b>DART AEROSPACE LTD</b>	<b>Work Order:</b> <i>85607</i>
<b>Description:</b> Saddle, Fwd Outboard	<b>Part Number:</b> D2571
<b>Inspection Dwg:</b> D2571 Rev. E	<b>Page 1 of 1</b>

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443		.439	.439	.439	.439		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.010	8.001	8.002	8.002		
F	0.490	0.510		.501	.497	.501	.502		
G	0.257	0.262		.258	.258	.258	.258		
H	0.375	0.380		.377	.377	.377	.377		
I	0.490	0.510		.501	.504	.500	.500		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.570	.572	.568	.567		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.490	1.500		1.495	1.495	1.495	1.495		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	3.869	3.879		3.874	3.874	3.874	3.874		
P	0.115	0.135		.125	.124	.125	.125		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.250	.251	.251	.251		
S	0.115	0.135		.125	.126	.125	.125		
T	0.178	0.198		.188	.188	.188	.188		
U	2.940	2.980		2.960	2.960	2.960	2.960		
V	0.230	0.250		.241	.242	.241	.242		
W	0.115	0.135		.120	.119	.120	.120		
X	0.308	0.313		.310	.310	.310	.310		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.365	.366	.365	.364		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.627	.626	.626	.625		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.247	.248	.248	.248		
AE	1.375	1.395		1.388	1.389	1.390	1.390		
AF	0.115	0.135		.130	.130	.130	.130		
AG	0.240	0.280		.260	.260	.260	.260		
AH	0.240	0.260		.248	.249	.249	.249		
AI	2.000	2.020		2.003	2.002	2.004	2.003		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	<i>SL</i>
Date:	<i>12-06-28</i>

Audited by:	<i>CM</i>
Date:	<i>12/07/08</i>

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	<i>[Signature]</i>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	85607
<b>Description:</b> Saddle, Fwd Outboard	<b>Part Number:</b>	D2571
<b>Inspection Dwg:</b> D2571 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				15	16	17	18		
A	0.438	0.443		0.439	0.439	0.439	0.439		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.001	8.003	8.003	8.003		
F	0.490	0.510		0.497	0.502	0.497	0.504		
G	0.257	0.262		0.258	0.258	0.258	0.258		
H	0.375	0.380		0.377	0.377	0.377	0.377		
I	0.490	0.510		0.501	0.500	0.501	0.503		
J	1.174	1.184		1.179	1.179	1.179	1.177		
K	0.558	0.578		0.568	0.568	0.567	0.566		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.490	1.500		1.495	1.495	1.495	1.495		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	3.869	3.879		3.874	3.874	3.874	3.874		
P	0.115	0.135		0.124	0.125	0.125	0.125		
Q	0.115	0.135		0.135	0.135	0.135	0.135		
R	0.240	0.260		0.251	0.251	0.250	0.250		
S	0.115	0.135		0.127	0.126	0.125	0.123		
T	0.178	0.198		0.188	0.188	0.188	0.188		
U	2.940	2.980		2.960	2.960	2.960	2.960		
V	0.230	0.250		0.242	0.243	0.241	0.243		
W	0.115	0.135		0.120	0.120	0.118	0.118		
X	0.308	0.313		0.310	0.310	0.310	0.310		
Y	0.760	0.765		0.760	0.760	0.760	0.760		
Z	0.352	0.372		0.364	0.365	0.364	0.364		
AA	0.470	0.530		0.500	0.500	0.500	0.500		
AB	0.615	0.635		0.626	0.626	0.630	0.630		
AC	0.053	0.073		0.063	0.063	0.063	0.063		
AD	0.240	0.260		0.250	0.248	0.247	0.249		
AE	1.375	1.395		1.389	1.389	1.391	1.390		
AF	0.115	0.135		0.130	0.130	0.130	0.130		
AG	0.240	0.280		0.260	0.260	0.260	0.260		
AH	0.240	0.260		0.249	0.248	0.248	0.247		
AI	2.000	2.020		2.004	2.004	2.006	2.005		
AJ	0.023	0.043		0.033	0.033	0.033	0.033		
Accept/Reject									

Measured by:	JL/PB
Date:	12-06-29

Audited by:	and
Date:	12/07/08

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

RELEASED

05.12.06

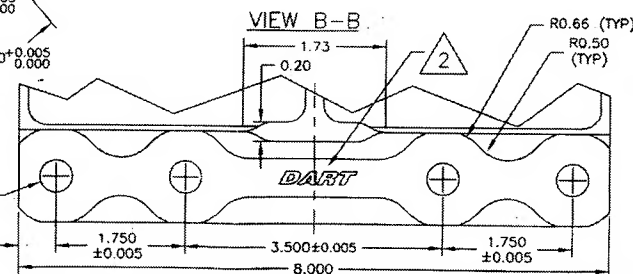
## NOTES

MATERIAL: 7075-T7351 (QQ-A-250/12) (REF DART SPEC. D6102-001)  
 FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1  
 POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3  
 BREAK ALL SHARP EDGES 0.010 TO 0.020  
 TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010  
 2 ENGRAVE DART LOGO TO MAX DEPTH OF 0.015 WITH MIN RAD 0.125  
 3 CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)  
 4 CHAMFER 0.063" x 45° ALL AROUND  
 5 CHAMFER 0.033" x 45° (SEE DETAIL C)

E

## VIEW B-B



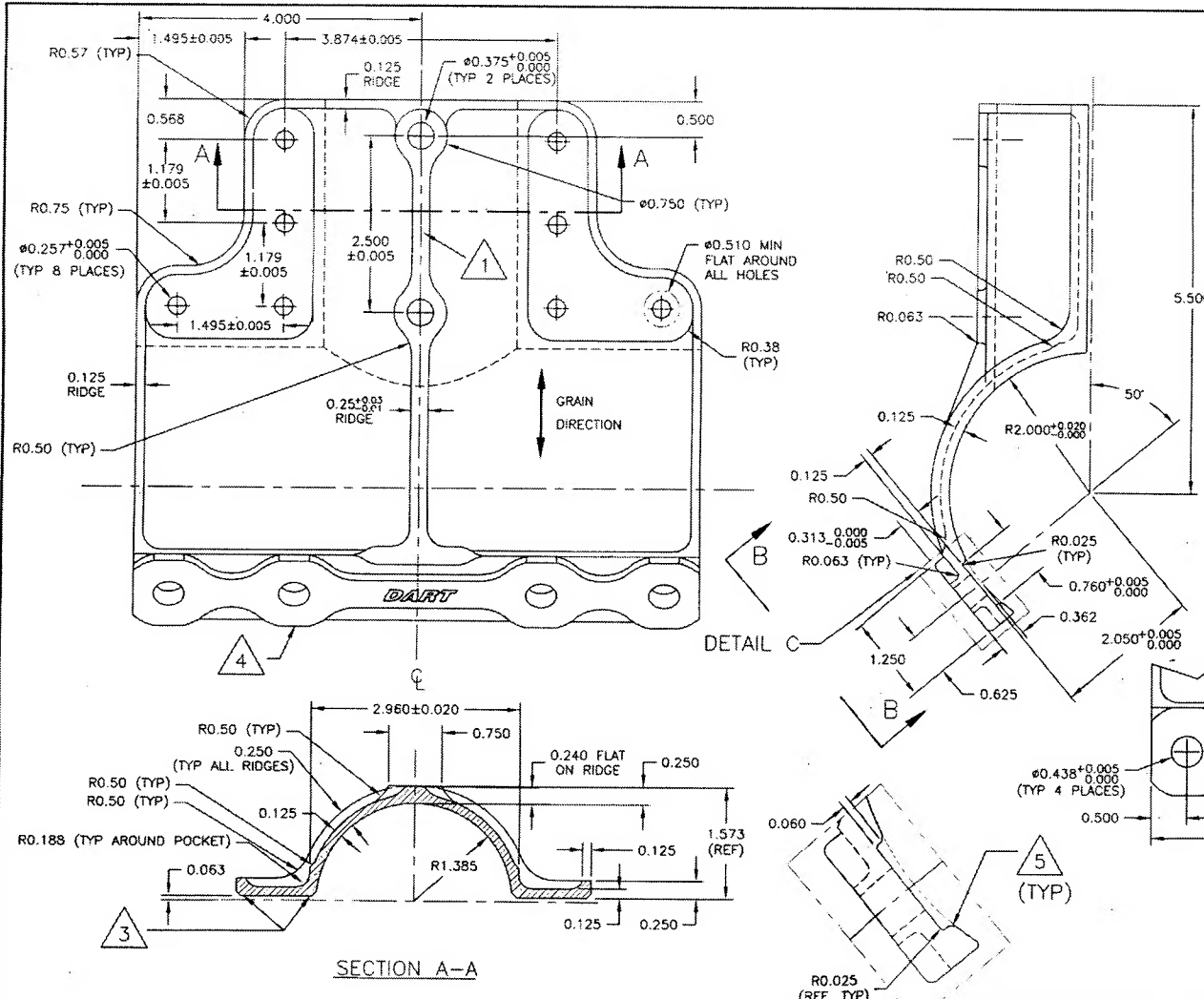
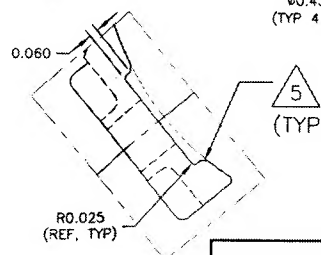
E	05.07.13	ADD CHAMFER ON RIDGE, NOTE 5
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCOMP. DEO 9123/9079/9102
B	96.12.02	ADD DIMENSIONS PER TSR A1177
A	96.09.16	ADD GRAIN DIR., 0.438 WAS 0.425
		NEW ISSUE

DESIGN	DS	DRAWN BY	PH	<b>DART</b>	DART AEROSPACE LTD.
CHECKED	#	APPROVED	#	D2571	REV. E
DATE	05.07.13	TITLE		OUTER FWD SADDLE	SHEET 1 OF 1
					SCALE 2:3

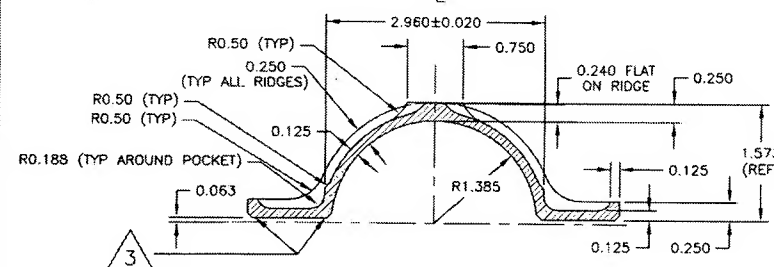
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DETAIL C  
 SCALE 4:3



## SECTION A-A



SHOP COPY  
 RETURN TO  
 ENGINEERING  
 UNCONTROLLED COPY  
 SUBJECT TO AMENDMENT  
 WITHOUT NOTICE  
 WORK ORDER  
 NO. 85607 MLJ

12/06/12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries